What is claimed:

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- 1. A contaminant adsorbing article, the article comprising:
 - (a) a body having a thickness of at least 1 cm comprising a plurality of parallel passages extending therethrough in a side-by-side array, the passages having a cross-sectional width of no more than about 5 mm; and
 - (b) a coating substantially covering the passages within the body, the coating comprising a polymeric binder and an adsorbent particulate, the thickness of the coating being no more than 0.5 mm; wherein the article is substantially free of any catalytic activity.
- 2. The article according to claim 1, wherein the passages have a honeycomb cross-sectional shape.
- The article according to claim 2, wherein the honeycomb shape is substantially hexagonal.
 - 4. The article according to claim 1, wherein the passages are defined by walls having a thickness of no greater than 0.1 mm.
 - 5. The article according to claim 1, wherein the article has an exposed surface area, defined by the passages, of about 250 cm² to 10 m².
 - 6. The article according to claim 1, wherein the coating contains a reactant.
 - 7. The article according to claim 6, wherein the reactant comprises a basic reactant capable of adsorbing an acidic contaminant.
- 8. The article according to claim 6, wherein the reactant comprises an acidic reactant capable of adsorbing a basic contaminant.

- 9. The article according to claim 1, wherein the body thickness and the passageway length are about 2 to about 10 cm.
- 10. The article according to claim 1, wherein the cross-sectional width of the passageway is about 0.5 to 2 mm.
 - 11. The article according to claim 1, wherein the polymeric binder is one of poly-(2-hydroxyethyl methacrylate), polyethylene glycol, or poly vinyl acetate.
- 10 12. The article according to claim 1, wherein the adsorbent particulate is one of carbon particles, ion exchange media, or zeolite.
 - 13. A system for removing a contaminant from a gas stream, the system comprising.
 - (a) an adsorptive article comprising:

- 15 (i) a body having a thickness of at least 1 cm and having a plurality of passages extending along the thickness, the passages having an interior surface and a cross-sectional width of no more than 5 mm; the passages defining an inlet of the article and an outlet; and
- (ii) a coating present on the interior surface of the passages, the coating comprising a polymeric binder and an adsorbent particulate and having a thickness less than 0.5 mm, the coating being substantially free of catalytic activity; and
 - (b) a particulate filter in air flow communication with the inlet of the article.
- The system according to claim 13, wherein the interior surface of the passages has
 an exposed surface area of about 250 cm² to 10 m².
 - 15. The system according to claim 13, wherein the coating comprises a reactant.
- 16. The system according to claim 15, wherein the reactant comprises a basic reactant capable of adsorbing an acidic contaminant.

- 17. The system according to claim 15, wherein the reactant comprises an acidic reactant capable of adsorbing a basic contaminant.
- 5 18. A method of removing a contaminant from a gas phase, the method comprising:
 - (a) installing a contaminant removal article in a pathway for a gas phase, the device comprising:
 - (i) a body having a thickness of at least 1 cm;
 - (ii) a plurality of passages extending through the body in a side-byside array, the passages having a cross-sectional width of no more than about 5 mm, the passages having an interior surface area and a coating substantially covering the passages within the body;
 - (iii) the coating comprising a polymeric binder and an adsorbent particulate, the coating having a thickness of no more than about 0.5 mm;
 - (iv) the article free of catalytic activity;
 - (b) contacting an input gas stream with the article, the input gas stream containing at least about 1000 ppm of a contaminant; and
 - (c) after contacting, obtaining an output gas stream, the output gas stream containing no more than 10% of the contaminant from the input gas stream.
 - 19. The method according to claim 18, wherein the step of obtaining comprises:
 - (a) obtaining the output gas stream, the output gas stream containing no more than 5% of the contaminant from the input gas stream.
 - 20. The method according to claim 19, wherein the step of obtaining comprises:
 - (a) obtaining the output gas stream, the output gas stream containing no more than 2% of the contaminant from the input gas stream.

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- 21. The method according to claim 18, wherein the contaminant comprises a volatile organic compound.
- The method according to claim 21, wherein the volatile organic compoundcomprises gasoline.
 - 23. The method according to claim 21, wherein the volatile organic compound comprises a volatile silane compound.
- 10 24. The method according to claim 21, wherein the contaminant comprises an acidic contaminant.
 - 25. The method according to claim 21, wherein the contaminant comprises a basic contaminant.
 - 26. The method according to claim 18, further comprising:

- (a) after the step of removing, releasing at least a portion of the contaminant from the coating.
- 20 27. The method according to claim 26, wherein the step of releasing the contaminant comprises:
 - (a) releasing at least a portion of the contaminant based on resumption of flow of the gas phase through the article.
- 25 28. The method according to claim 26, wherein the step of releasing the contaminant comprises:
 - (a) releasing at least a portion of the contaminant by application of heat to the article.

- 29. The method according to claim 18, wherein the step of installing a contaminant removal article in a pathway for a gas phase comprises:
 - (a) installing the contaminant removal article in an industrial process air locus or commercial building air cleaning locus.

- 30. The method according to claim 18, wherein the step of installing a contaminant removal article in a pathway for a gas phase comprises:
 - (a) installing the contaminant removal article in semiconductor processing locus.

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- 31. The method according to claim 18, wherein the step of installing a contaminant removal article in a pathway for a gas phase comprises:
 - (a) installing the contaminant removal article in an air induction system in a vehicle engine.

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32. The method according to claim 31, wherein the air induction system comprises a tubular member having an air intake and an opposite outflow directed to an engine intake, the tubular member comprising an installation locus adapted retain the contaminant removal article.

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- 33. The method according to claim 32, wherein the air induction system further comprises a particulate filter element.
- 34. The method according to claim 18, wherein the step of installing a contaminant
 removal article in a pathway for a gas phase comprises:
 - (a) installing the contaminant removal article on a fuel cell oxidant stream.
 - 35. A method of removing a contaminant from a gas phase, the method comprising:
 - (a) installing a contaminant removal article in a pathway for a gas phase, the device comprising a body having a thickness of at least 1 cm, the body

comprising a plurality of passages extending through the body in a sideby-side array, the passages having a cross-sectional width of no more than about 5 mm, the passages having an interior surface and a coating substantially covering the interior surface, the coating comprising a polymeric binder and an adsorptive particulate, the coating having a thickness of no more than 0.5 mm, and the article having only incidental catalytic properties;

- (b) contacting a gas-phase with the article, the gas-phase having contaminant present at a level of 50 ppm-volume to 2 ppb-volume; and
- 10 (c) removing at least 99% of the contaminant from the gas-phase with a pressure drop of no greater than 1 inch water at an airflow filter face velocity of 0.5 m/s.

- 36. The method according to claim 35, wherein the step of removing comprises:
- 15 (a) removing at least 99% of the contaminant from the gas-phase with a pressure drop of no greater than 0.5 inch water at an airflow filter face velocity of 0.5 m/s.
 - 37. The method according to claim 35, wherein the step of removing comprises:
- 20 (a) removing at least 99% of the contaminant from the gas-phase with a pressure drop of no greater than 0.1 inch water at an airflow filter face velocity of 0.5 m/s.
- 38. The method according to claim 35, wherein the step of installing a contaminant removal article in a pathway for a gas phase comprises:
 - (a) installing the contaminant removal article in an industrial process air locus or commercial building air cleaning locus.
- 39. The method according to claim 35, wherein the step of installing a contaminant
 30 removal article in a pathway for a gas phase comprises:

- (a) installing the contaminant removal article in semiconductor processing tool locus.
- 40. The method according to claim 35, wherein the step of installing a contaminant removal article in a pathway for a gas phase comprises:
 - (a) installing the contaminant removal article in an air induction system in a vehicle engine.
- 41. The method according to claim 40, wherein the air induction system comprises a tubular member having an air intake and an opposite outflow directed to an engine intake, the tubular member comprising an installation locus adapted retain the contaminant removal article.
- 42. The method according to claim 41, wherein the air induction system further comprises a particulate filter element.

- 43. The method according to claim 35, wherein the step of installing a contaminant removal article in a pathway for a gas phase comprises:
 - (a) installing the contaminant removal article on a fuel cell oxidant stream.
- 44. A method of manufacturing an adsorptive coated article, the article comprising a body having a thickness of at least 1 cm and comprising a plurality of passages extending therethrough in a side-by-side array, the passages having a cross-sectional width of no more than about 5 mm, the method comprising:
- 25 (a) forming a dispersion comprising a polymer composition and a particulate adsorbent;
 - (b) contacting the passages with the dispersion to form a wet coating; and
 - (c) removing the solvent from the wet coating leaving an active adsorbent layer;
- wherein the adsorbent layer is substantially free of catalytic activity.

45. The method according to claim 44, wherein the step of forming a dispersion comprises:

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- (a) forming a dispersion comprising the polymer composition, the particulate adsorbent, and a solvent.
- 46. A method of manufacturing an adsorptive coated article, the article comprising a body having a thickness of at least 1 cm and comprising a plurality of passages extending therethrough in a side-by-side array, the passages having a cross-sectional width no greater than about 5 mm, the method comprising:
 - (a) forming a mixture comprising an adsorbent particulate and a polymeric adhesive, the polymeric adhesive present at a temperature above the melting point of the polymeric adhesive;
 - (b) contacting the passages with the mixture to form a melt coating; and
- (c) cooling the melt coating to at least partially solidify the polymeric adhesive, leaving an active adsorbent layer.
- 47. The method according to claim 46, wherein the melt coating has a thickness of no greater than 0.5 mm.
- 48. An apparatus for removing a contaminant from an atmosphere in a semiconductor production locus, the apparatus comprising:
 - (a) an adsorptive element comprising a body having a thickness of at least 1 cm and comprising a plurality of passages extending therethrough in a side-by-side array, the passages having a cross-sectional width no greater than about 5 mm, the element comprising a coating less than about 0.5 mm thick substantially covering the passages, the coating comprising a polymeric binder and an adsorptive particulate and having only incidental catalytic activity;

- (b) a housing having an inlet, an outlet, a receiving volume for the adsorptive element, each of the inlet and outlet in air flow communication with the passages of the adsorptive element; and
- (c) means to move the atmosphere through the element.

49. The apparatus according to claim 48 comprising at least three adsorptive elements, a first element comprising an acidic reactive to remove basic contaminants, and a second element comprising a basic reactive to remove acidic contaminants.

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- 50. An air induction system in a vehicle engine, the induction system comprising:
 - (a) a tubular member having an air intake and an opposite outflow directed to an engine intake, the tubular member comprising an installation locus; and
 - (b) a contaminant adsorbing element comprising a body having a thickness of at least 1 cm and comprising a plurality of passages extending therethrough in a side-by-side array, the passages having a major width less than about 5 mm and a coating substantially covering the passages, the coating comprising a polymeric binder and a carbon particulate, the coating having a thickness of no greater than about 0.5 mm, the article free of catalytic activity, the adsorbing element positioned within the

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51. The air induction system according to claim 50, wherein the element has a first face and a second face, each of the first face and the second face having an area of 77.5 to

installation locus.

155 cm².

- 52. The air induction system according to claim 50, wherein the contaminant adsorbing element has a generally rectangular shape.
- 53. The air induction system according to claim 50, wherein the adsorbing element is configured to adsorb gasoline vapors.

- 54. The air induction system according to claim 50, wherein the adsorbing element is configured to adsorb diesel.
- 5 55. The air induction system according to claim 50, wherein the adsorbing element is permanently fixed within the tubular member.
 - 56. The air induction system according to claim 50, wherein the adsorbing element is configured to adsorb contaminants from an air stream at a first air flow rate of the air stream, and to desorb contaminants from the coating at a second air flow rate, the second air flow rate being greater than the first air flow rate.

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57. The air induction system according to claim 50, wherein the adsorbing element is constructed to adsorb at least 90% of contaminants passing through the tubular member.